



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Paper No. 12

Application Number: 09/584,162  
Filing Date: May 30, 2000  
Appellant(s): KINSELLA, DAVID J.

**MAILED**

JUL 29 2002

Technology Center 2600

\_\_\_\_\_  
Michael C. Barrett  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 6/17/2002.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

Art Unit: 2623

**(2) Related Appeals and Interferences**

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) Status of Claims**

The statement of the status of the claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Invention**

The summary of invention contained in the brief is correct.

**(6) Issues**

The appellant's statement of the issues in the brief is correct.

**(7) Grouping of Claims**

Appellant's brief includes a statement that claims 1, 61, 67, 71 and 79 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) Claims Appealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

5,229,764	Matchett et al	7-1993
5,513,272	Bogosian, Jr.	4-1996

Art Unit: 2623

5,703,356	Bidiville et al	12-1997
5,838,306	O'Connor et al	11-1998
5,337,358	Axelrod et al	8-1994

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**I. Claims 1, 2, 10, 11-14, 49-56 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matchett et al. (US 5229764) in view of Bogosian, Jr (US 5513272).**

With respect to claim 1, Matchett discloses a biometric authentication matrix comprising: an interface for operable communicating with an electronic system; a position sensor, responsive to user movement thereof, for conveying positional information by way of said interface to the electronic system; a user-depressable button for conveying selection information by way of said interface to the electronic system; a biometric sensor disposed at a location such that when operating said pointing device in a normal manner a user's hand rests naturally in a position to place a finger of the user's hand in proximity to and readable by said biometric sensor, (see col. 11, line 65 through col. 12 line 5, also, the functions as claimed as the pointing device are the inherent functions of the computer mouse) as claimed in claim 1. However, Matchett fails to disclose the: a verification system ..... the audit log storage ..... said electronic system, as claimed in claim 1. Bogosian in system for verification teaches: a verification system .....the audit log storage ..... said electronic system, (see col. 5, lines 25-33, wherein, there exist an storage data of the individuals who tried

Art Unit: 2623

to gain access to or obtained data from a computer system and this storage could very well be used later for any kind of audits and or investigative objectives) as claimed.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the Matchett's system by introducing the features like storage data of the individuals who tried to gain access to or obtained data from a computer system, that is, there is an storage for keeping track of successful or unsuccessful attempts, as taught by Bogosian in the verification system of the person. This modification will provide an authentication system that will make an pointing apparatus to be used as an authentication apparatus that will store the identification information "fingerprints" in a storage that will be easily used to compared to the criminal databases for catching the thief (see col. 5, lines 31-33 of Bogosian).

With respect to claim 2, Matchett further discloses: the biometric sensor ..... to the computer system, (see col. 11, line 65 through col. 12 line 5) as claimed in claim 2.

With respect to claim 10, Matchett further discloses: the position sensor comprises a mouse, (see col. 11, line 65-67) as claimed in claim 10.

With respect to claim 11, Matchett further discloses: one button position; and wherein the fingerprint sensor is disposed below a particular one of the at least one button positions, (see col. 11, line 65 through col. 12 line 5) as claimed in claim 11.

With respect to claims 12-14, Matchett and Bogosian disclose the invention substantially as claimed and discussed above. They fail to disclose: an operable button is located at the particular button position, as claimed in claim 12; an inoperable button is located at the particular button position, as claimed in claim 13; and no button is located at the particular button position, as claimed in claim 14. However, it is well known in the art for the computer mouse to have a button which is "operable button" with some functionality or "inoperable button" with no functionality or "no button" at all.

Therefore, it would have been obvious to one of ordinary skill in the art at the same time the invention was made to modify the Matchett and Bogosian biometric authentication apparatus by introducing the well known features of the computer mouse like "operable button" or "inoperable button" or "no button" for making the mouse well suited for any individual for the purpose of authenticating the person or user.

With respect to claim 49-52, Matchett and Bogosian disclose the invention substantially as claimed and discussed in claim 1. However, they fail to disclose: the user ..... memory devices, as claimed in claim 49; one or more ..... flash memory, as claimed in claim 50; user storage ..... memory device, as claimed in claim 51; and user storage ..... encoded information, as claimed in claim 52. But, it is well known in the art to use memory devices to store the information in the encoded manner and also, there exist and used different devices for the memory such as CD-ROM, magnetic disk, optical disk, flash memory and removable memory device.

Art Unit: 2623

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the Matchett's and Bogosian's system by introducing the features like using memory devices to store the information in the encoded manner and also, there exist and used different devices for the memory such as CD-ROM, magnetic disk, optical disk, flash memory and removable memory device as they are well known in the art. This modification will provide an authentication system that will use different sources of the memory to expand the storage of the apparatus giving the apparatus more storage resources.

With respect to claim 53-55, Matchett and Bogosian discloses the invention substantially as claimed and discussed in claim 1. However, they fails to disclose: authorization profile ..... electronic system, as claimed in claim 53; audit log ..... electronic system, as claimed in claim 54; and audit log storage ..... biometric sensor, as claimed in claim 55. But, the features like a date and time stamp and the function i.e. deposits, withdrawal, etc. and the amount on the ATM receipt "authorization profile" and if tried more than the threshold to access the machine and is the access is denied the machine will keep the access card for the security purpose, this shoes that there is an storage for keeping track of successful or unsuccessful attempts "audit log storage".

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the Matchett's and Bogosian's system by introducing the features like a date and time stamp and the function i.e. deposits,

Art Unit: 2623

withdrawal, etc. and the amount on the ATM receipt and if tried more than the threshold to access the machine and if the access is denied the machine will keep the access card for the security purpose, this shows that there is a storage for keeping track of successful or unsuccessful attempts, as these features are well known in the art of authentication. This modification will provide an authentication system that will make an pointing apparatus to be used as an authentication apparatus.

With respect to claims 56 and 60, the limitation cited in the claim is same as the limitations cited in claim 1 except of the limitation: a substance detection ..... biometric sensor as claimed. But it is well known in the art of the authentication to have one or more features to be compared for the authentication purpose.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the Matchett's and Bogosian's system by introducing the feature like having one than one feature to be compared or evaluated for the purpose of authentication. This modification will provide an authentication system that will use one than one feature for the authentication of the person making the system more secure.

**II. Claims 7-9, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matchett et al. (US 5229764) in view of Bogosian (US 5513272) and further in view of Applicant's admitted prior art.**

Art Unit: 2623

With respect to claims 7-9, Matchett and Bogosian discloses the invention substantially as claimed and discussed above. They fail to disclose: biometric sensor is ..... digitized scanned .....to said electronic system, as claimed in claim 7; biometric sensor is ..... a compressed digital .....to said electronic system, as claimed in claim 8; and biometric sensor is ..... of a minutia .....to said electronic system, as claimed in claim 9. But, it is well known in the art that the fingerprints are digitized, compressed and compared for the authentication of the individual as admitted by the applicant (see page 3, lines 18-21 of the specification).

Therefore, it would have been obvious to one of ordinary skill in the art at the same time the invention was made to modify the Matchett and Bogosian biometric authentication apparatus by introducing the well known features like digitizing and compressing the data and the finally comparing it for the purpose of authenticating the person or the user.

With respect to claims 20 and 21, Matchett and Bogosian discloses the invention substantially as claimed and discussed above. They fail to disclose: interface comprises a cabled interface, as claimed in claim 20; and interface comprises a wireless interface, as claimed in claim 21. But, it is well known in the art of computer communication to have features like cable and wireless interface between the mouse and the computer for the communication purpose as admitted by the applicant (see page 4, lines 24-27 of the specification).



Art Unit: 2623

Therefore, it would have been obvious to one of ordinary skill in the art at the same time the invention was made to modify the Matchett and Bogosian biometric authentication apparatus by introducing the well known features like cable and wireless interface between the mouse and the computer for the communication purpose, this will make the authenticating apparatus more user friendly for the purpose of authenticating the person or the user.

**III. Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matchett et al. (US 5229764) in view Bogosian (US 5513272) and further in view of Bidiville et al. (US 5703356).**

With respect to claim 15, Matchett and Bogosian discloses the invention substantially as claimed and discussed above. Matchett further discloses: fingerprint sensor is disposed below, (see col. 11, line 65 through col. 12 line 5). However, they fail to disclose: at least one button positions numbers three; the fingerprint sensor is disposed below a centermost button position of the three button positions, as claimed in claim 15. Bidiville in a pointing device teaches: at least one button positions numbers three, (see figure 1, a three button mouse). And, having a sensor in the centermost button position of the three button positions is a design choice as it is known in the three-button mouse that the centermost button has no functionality corresponds to it.

Therefore, it would have been obvious to one of ordinary skill in the art at the same time the invention was made to modify the Matchett and Bogosian biometric authentication apparatus by introducing the well known feature of the three button

Art Unit: 2623

computer mouse like no functionality of the centermost button to be used for the fingerprint sensor and the three button mouse as taught by Bidiville, for making the mouse well suited for any individual for the purpose of authenticating the person or user.

With respect to claim 16, Matchett and Bogosian discloses the invention substantially as claimed and discussed above. However, they fail to disclose: the position sensor comprises a trackball as claimed in claim 16; the position sensor further includes a second trackball, as claimed in claim 17; the position sensor ..... left-handed user, as claimed in claim 18; and trackball is rotatably-connected to the pointing device, as claimed in claim 19. But, use of the trackball in place of the mouse is well known in the art as seen in col. 1, lines 47-51 of Bidiville as claimed in claim 16. Bidiville further teaches: the position sensor ..... left-handed user, (see col. 1, lines 53-58) as claimed in claim 18; and trackball is rotatably-connected to the pointing device, (see col. 1, lines 53-58) as claimed in claim 19.

With respect to claim 17, it is the design choice to use one or two trackball for the convenient sake. Therefore, it would have been obvious to one of ordinary skill in the art at the same time the invention was made to modify the Matchett and Bogosian biometric authentication apparatus by introducing the well known feature of the trackball usage for the pointing device in place of the mouse and the mechanical construction of

Art Unit: 2623

the trackball as taught by the Bidiville, for making the trackball well suited for any individual for the purpose of authenticating the person or user.

**IV. Claim 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matchett et al. (US 5229764) in view Bogosian (US 5513272) and further in view of O'Connor et al. (US 5838306).**

With respect to claims 22-24, Matchett and Bogosian discloses the invention substantially as claimed and discussed above for claims 11. However, they fail to disclose: the fingerprint sensor includes an optical imaging array; and the particular button position includes a transparent material through which the user's fingerprint may be imaged by the imaging array as claimed in claims 22; and the fingerprint sensor includes a capacitive imaging array located at the particular button position contactable by the user's finger so that the user's fingerprint may be imaged by the capacitive imaging array, as claimed in claim 23. O'Connor in a mouse with security feature teaches: the fingerprint sensor includes an optical imaging array, (see col. 3, lines 7-10) and the particular button position includes a transparent material through which the user's fingerprint may be imaged by the imaging array, (see figure 1, and col. 4, lines 1-5) as claimed in claims 22; and the fingerprint sensor includes a capacitive imaging array located at the particular button position contactable by the user's finger so that the user's fingerprint may be imaged by the capacitive imaging array, (see col. 3, lines 7-10 and see figure 1, and col. 4, lines 1-5) as claimed in claim 23.

Art Unit: 2623

It would have been obvious to one of ordinary skill in the art at the same time the invention was made to modify the Matchett and Bogosian biometric authentication apparatus by introducing the optical imaging array and the transparent material at the button of the mouse as taught by the O'Connor, for making the mouse well suited for any imaging the fingerprints for the purpose of authenticating the person or user.

With respect to claims 24, it is a design choice to have the fingerprint sensor incorporated at any button location.

Claims 61, 67-70, 71-78 and 79-81 are rejected as claims 1-24 and 49-60, because claims 61, 67-70, 71-78 and 79-81 are claiming similar subject matter as claims 1-24 and 49-60.

**V. Claims 57 and 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matchett et al. (US 5229764) in view Bogosian (US 5513272) and further in view of Axelrod et al (US 5337358).**

With respect to claims 57 and 58, Matchett and Bogosian discloses the invention substantially as claimed and discussed in claim 1. However, they fail to disclose: the substance detection sensor ..... of the user, as claimed in claim 57; and verification system ..... blood alcohol contents, as claimed in claim 58. Axelrod in authentication apparatus teaches: substance detection sensor ..... of the user, (see col. 4, lines 66-69) as claimed in claim 57. And, it is well known in the authorization art

Art Unit: 2623

to prevent or allow the persons on the basis of the alcohol contents in the blood as claimed in claim 58.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the Matchett's and Bogosian's system by introducing the features, a substance detection sensor for detecting the blood alcohol contents as taught by Axelrod and the well known feature of the authorization art i.e. to prevent or allow the persons on the basis of the alcohol contents in the blood. This modification will provide an authentication system that will make an pointing apparatus to be used as an authentication apparatus using two verification systems for the extra security.

#### **(11) *Response to Argument***

B-1. Neither Matchett nor Bogosian discloses or suggests the claimed authorization profile storage

Applicant alleges that claimed limitation of "authorization profile" in claim 1 is not suggested or disclosed by either of the references. Examiner disagrees with the applicant. Bogosian's system of verifying an authorized user for an application such as ATM (see col. 8, lines 34-36, of Bogosian), authorize the user to conduct any transactions through ATM. The authorized user is the only one that is allowed to use the ATM in order to conduct the transactions. The claim 1 did not include the definition of the authorization profile. Also, Bogosian reference does authenticate the individuals for a use of an ATM, the use of the ATM is restricted to the specific users i.e. the users with the authorization profile stored, (see figure 1). For example the authorization

Art Unit: 2623

profile may include items such as how much amount the authorized user can withdraw at one time or in a day. This will normally vary from user to user, as well.

B-2. Neither Matchett nor Bogosian discloses or suggests the claimed audit log storage

Applicant alleges that the claimed limitation of "audit log" in claim 1 is not suggested or disclosed by either of the references. Examiner disagrees with the applicants arguments, and would like to point out that Bogosian in col. 5, lines 24-33, states that if a users fingerprints does not match "denial of" to the stored fingerprints the fingerprints will be stored, for the purpose of determining any criminal activity. Also, the recording of the fingerprint corresponds to the unsuccessful attempt i.e. "attempted transaction" as claimed.

B-3. Automatic Teller Machines do not disclose or suggest the claimed authorization profile storage

Applicant alleges that rejection was made and later withdrawn by the examiner in this application using Automatic Teller Machine reference (without support). Examiner disagrees, as there is no such rejection was made in this application.

The rejection may have been in the parent application, and it [rejection] may have been withdrawn because of the amendments to the claims and not because of the arguments as alleged by the applicant.

Art Unit: 2623

C. Matchett in view of Bogosian and Applicants disclosure does not render claims 7-9, 20, or 21 unpatentable

Claims 7-9, 20 and 21 stand or fall with claim 1. Therefore, the reasons as set forth for claim 1 applies for these claims also.

D. Matchett in view of Bogosian and Bidiville does not render claims 15-19 unpatentable

Claims 15-19 stand or fall with claim 1. Therefore, the reasons as set forth for claim 1 applies for these claims also.

E. Matchett in view of Bogosian and O'Connor does not render claims 22-24 unpatentable

Claims 22-24 stand or fall with claim 1. Therefore, the reasons as set forth for claim 1 applies for these claims also.

F. The cited art, taken alone or in any combination, does not render claims 61 and 67-81 unpatentable

Applicant alleges that claims 61, 67, 71 and 79 involve the authorization profile and audit log storage, therefore they are allowed. Examiner disagrees, the arguments as made above for the authorization profile and audit log storage for the claim 1, does stand here also.

Art Unit: 2623

G. Matchett in view of Bogosian Axelrod does not render claims 57 and 58 unpatentable

Claims 57-58 stand or fall with claim 1. Therefore, the reasons as set forth for claim 1 applies for these claims also.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Vikkram Bali  
Examiner  
Art Unit 2623

vb  
July 22, 2002

Conferees  
Amelia Au *AK*  
Joe Mancuso *JS*  
Vikkram Bali *VB*

MICHAEL C BARRETT  
FULBRIGHT & JAWORSKI  
SUITE 1900  
600 CONGRESS AVENUE  
AUSTIN, TX 78701

*[Signature]*  
JOSEPH MANCUSO  
PRIMARY EXAMINER